## **LISTING OF CLAIMS**

- 1. (Canceled)
- 2. (Canceled)
- 3. (Withdrawn) The method of Claim 1, further comprising:
  - extracting product management information in a third form that is associated with a second source computerized product management system that is distinct from the first source computerized product management system;
  - converting the product management information in the third form into product management information that is in the second intermediate form;
  - converting the product management information in the second intermediate form into product management information in the target form; and
  - using the product management information in the target form to perform at least one computer-implemented act from a set of computer-implemented acts comprising: creating a new product management record in the target computerized product management system; and
    - updating an existing product management record in the target computerized product management system.
- 4. (Canceled)
- 5. (Previously Presented) The method of Claim 29, wherein each of the plurality of product elements comprises one or more elements selected from a group comprising:
  - a product configuration element;
  - a product identifier;
  - a product base data element;
  - a product sales data element;
  - a related product line element for defining a product line element;
  - a product list of price type element for defining a plurality of product price type elements;

- 2 - Application No.: 10/751,008

- a product list of related inventory location element for defining a plurality of product related inventory location elements for the product;
- a list of related product element for defining a plurality of related product elements;
- a product list of related business unit element for defining a product related business unit element; and
- a product custom data element.
- 6. (Previously Presented) The method of Claim 5, wherein the product base data element comprises one or more elements selected from a group comprising:
  - a product category code element;
  - a product description element;
  - an product effective end date element for defining a product's effective validity end date; an product effective start date element for defining a product's effective validity start date;
  - a global product identifier element;
  - a global product classification code element;
  - a global product serial identifier;
  - a global product special handling code element;
  - a product name element;
  - a product number element;
  - a product part number element;
  - a product status code element;
  - a product type code element;
  - a product unit of measure code element; and
  - a product vendor part serial number element.
- 7. (Previously Presented) The method of Claim 5, wherein the product sales data element comprises one or more elements selected from a group comprising:
  - a product field replaceable flag;
  - a product lead time element;
  - a product maximum order quantity element;
  - a product minimum order quantity element;
  - a product revision number element;

```
a product orderable flag;
a sales product flag;
a service product flag;
a service instance flag; and
```

a serialized product flag.

- 8. (Previously Presented) The method of Claim 5, wherein
  - the product configuration data element comprises a product configuration flag and a product related class element that is specific to a product;
  - the product line element comprises a product line identifier, a product line base data element and a product line custom data element, wherein the product line base data element comprises:
    - a product line description element; and
    - a product line name element;
  - each of the plurality of product price type elements comprises a product price type code element;
  - each of the plurality of product related inventory location elements for the product comprises a product inventory location identifier and a product inventory data element for the product, wherein the product inventory data element for the product comprises one or more elements selected from:
    - a product inventory location classification data element, wherein the product inventory location classification data element comprises one or more elements selected from:
      - a product movement class code element; and
      - a product value class code element; and
    - a product inventory location stocking data element, wherein the product inventory location stocking data element comprises one or more elements selected from:
      - a product allocate below safety stock level flag;
      - a product auto substitute flag;
      - a product auto allocate flag;
      - a product maximum inventory level element;

- 4 - Application No.: 10/751,008

- a product minimum inventory level element; and
- a product safety stock level element;
- each of the plurality of related product elements comprises one or more elements selected from:
  - a related product identifier;
  - a related product name element;
  - a related product number element; and
  - a related product type code element; and
- the product related business unit element comprises a product organization identifier and a product business unit data element, wherein the product business unit data element comprises a product sales unit of measure code element.
- 9. (Canceled)
- 10. (Canceled)
- 11. (Withdrawn) The computer-readable medium of Claim 26, further comprising: extracting product management information in a third form that is associated with a second source computerized product management system that is distinct from the first source computerized product management system;
  - converting the product management information in the third form into product management information that is in the second intermediate form;
  - converting the product management information in the second intermediate form into product management information in the target form; and
  - using the product management information in the target form to perform at least one computer-implemented act from a set of computer-implemented acts comprising: creating a new product management record in the target computerized product management system; and
    - updating an existing product management record in the target computerized product management system.

-5 - Application No.: 10/751,008

- 12. (**Currently Amended**) The computer-readable medium of Claim 26, wherein the **hierarchy of data elements common set of product management information** comprises a plurality of product elements which comprise other elements.
- 13. (Previously Presented) The computer-readable medium of Claim 12, wherein each of the plurality of product elements comprises one or more elements selected from a group comprising:
  - a product configuration data element;
  - a product identifier;
  - a product base data element;
  - a product sales data element
  - a related product line element for defining a product line element;
  - a product list of price type element for defining a plurality of product price type elements;
  - a product list of related inventory location element for defining a plurality of product related inventory location elements for the product;
  - a list of related product element for defining a plurality of related product elements;
  - a product list of related business unit element for defining a product related business unit element; and
  - a product custom data element.
- 14. (Previously Presented) The computer-readable medium of Claim 13, wherein the product base data element comprises one or more elements selected from a group comprising:
  - a product category code element;
  - a product description element;
  - an product effective end date element for defining a product's effective validity end date;
  - an product effective start date element for defining a product's effective validity start
    - date:
  - a global product identifier element;
  - a global product classification code element;
  - a global product serial identifier;
  - a global product special handling code element;
  - a product name element;
  - a product number element;

```
a product part number element;
```

- a product status code element;
- a product type code element;
- a product unit of measure code element; and
- a product vendor part serial number element.
- 15. (Previously Presented) The computer-readable medium of Claim 13, wherein the product sales data element comprises one or more elements selected from a group comprising:
  - a product field replaceable flag;
  - a product lead time element;
  - a product maximum order quantity element;
  - a product minimum order quantity element;
  - a product revision number element;
  - a product orderable flag;
  - a sales product flag;
  - a service product flag;
  - a service instance flag; and
  - a serialized product flag.
- 16. (Previously Presented) The computer-readable medium of Claim 13, wherein the product configuration data element comprises a product configuration flag and a product related class element that is specific to a product;
  - the product line element comprises a product line identifier, a product line base data element and a product line custom data element, wherein the product line base data element comprises:
    - a product line description element; and
    - a product line name element;
  - each of the plurality of product price type elements comprises a product price type code element;
  - each of the plurality of product related inventory location elements for the product comprises a product inventory location identifier and a product inventory data element for the product, wherein the product inventory data element for the product comprises one or more elements selected from:

- a product inventory location classification data element, wherein the product inventory location classification data element comprises one or more elements selected from:
  - a product movement class code element; and
  - a product value class code element; and
- a product inventory location stocking data element, wherein the product inventory location stocking data element comprises one or more elements selected from:
  - a product allocate below safety stock level flag;
  - a product auto substitute flag;
  - a product auto allocate flag;
  - a product maximum inventory level element;
  - a product minimum inventory level element; and
  - a product safety stock level element;
- each of the plurality of related product elements comprises one or more elements selected from:
  - a related product identifier;
  - a related product name element;
  - a related product number element; and
  - a related product type code element; and
- the product related business unit element comprises a product organization identifier and a product business unit data element, wherein the product business unit data element comprises a product sales unit of measure code element.
- 17. (Withdrawn) A data structure for managing product, the data structure comprising a list of product element for defining a hierarchy of data elements, wherein the hierarchy of data elements includes a plurality of product elements which include other elements.
- 18. (Withdrawn) The data structure of Claim 17, wherein each of the plurality of product elements includes one or more elements selected from a group comprising:
  - a product identifier;
  - a product base data element;

- a product sales data element
- a product configuration data element;
- a related product line element for defining a product line element;
- a product list of price type element for defining a plurality of product price type elements;
- a product list of related inventory location element for defining a plurality of product related inventory location elements for the product;
- a list of related product element for defining a plurality of related product elements;
- a product list of related business unit element for defining a product related business unit element; and
- a product custom data element.
- 19. (Withdrawn) The data structure of Claim 18, wherein the product base data element includes one or more elements selected from a group comprising:
  - a product category code element;
  - a product description element;
  - a product effective end date element for defining a product's effective validity end date;
  - a product effective start date element for defining a product's effective validity start date;
  - a global product identifier element;
  - a global product classification code element;
  - a global product serial identifier;
  - a global product special handling code element;
  - a product name element;
  - a product number element;
  - a product part number element;
  - a product status code element;
  - a product type code element;
  - a product unit of measure code element; and
  - a product vendor part serial number element.

- 9 - Application No.: 10/751,008

- 20. (Withdrawn) The data structure of Claim 18, wherein the product sales data element includes one or more elements selected from a group comprising:
  - a product field replaceable flag;
  - a product lead time element;
  - a product maximum order quantity element;
  - a product minimum order quantity element;
  - a product revision number element;
  - a product orderable flag;
  - a sales product flag;
  - a service product flag;
  - a service instance flag; and
  - a serialized product flag.
- 21. (Withdrawn) The data structure of Claim 18, wherein
  - the product configuration data element includes a product configuration flag and a product related class element that is specific to a product;
  - the product line element includes a product line identifier, a product line base data element and a product line custom data element, wherein the product line base data element includes:
    - a product line description element; and
    - a product line name element;
  - each of the plurality of product price type elements includes a product price type code element;
  - each of the plurality of product related inventory location elements for the product includes a product inventory location identifier and a product inventory data element for the product, wherein the product inventory data element for the product includes one or more elements selected from:
    - a product inventory location classification data element, wherein the product inventory location classification data element includes one or more elements selected from:
      - a product movement class code element; and
      - a product value class code element; and

- a product inventory location stocking data element, wherein the product inventory location stocking data element includes one or more elements selected from:
  - a product allocate below safety stock level flag;
  - a product auto substitute flag;
  - a product auto allocate flag;
  - a product maximum inventory level element;
  - a product minimum inventory level element; and
  - a product safety stock level element;
- each of the plurality of related product elements includes one or more elements selected from:
  - a related product identifier;
  - a related product name element;
  - a related product number element; and
  - a related product type code element; and
- the product related business unit element includes a product organization identifier and a product business unit data element, wherein the product business unit data element includes a product sales unit of measure code element.

22 and 23. (Canceled)

24. (**Currently Amended**) A method in a computing system, the method comprising: defining a product common model, wherein

the defining comprises

<u>determining a common set of fields of product management</u> <u>information</u>,

each field of the common set of fields corresponds to a source field in a source set of fields of product management information,

the source set of fields comprises

at least one source field that does not correspond to any field of the common set of fields,

the each field of the common set of fields further corresponds to a target field in a target set of fields of product management information, and

### the target set of fields comprises

# at least one target field that does not correspond to any field of the common set of fields;

extracting a [[first]] source set of product management information in a first form, wherein

the first form is associated with a first source set is stored on a source computerized product management system.

the source set is stored within the source set of fields, and

the extracting is performed by an integration server coupled to the source computerized product management system;

converting the [[first]] source set of product management information in the first form, wherein

the converting the [[first]] source set of product management information in the first form converts the [[first]] source set of product management information in the first form into a first set of product management information that is in a second intermediate form a common set of product management information,

the common set of product management information is stored within the

common set of fields of the product common model, and
the converting the source set is performed by the integration server;

converting the [[first]] <u>common</u> set of product management information <u>in the second</u> <u>intermediate form</u>, wherein

the converting the [[first]] common set of product management information in

the second intermediate form converts the [[first]] common set of

product management information in the second intermediate form

into a first set of product management information in a target form

target set of product management information, [[and]]

the first set of product management information in the target form

corresponds to target set is stored on a target computerized product
management system.

the target set is stored within the target set of fields, and the converting the common set is performed by the integration server;

- 12 - Application No.: 10/751,008

in response to the converting of the first set of product information into the target form, creating a new product record in the target computerized product management system;

extracting a second set of product information in the first form;
converting the second set of product management information in the first form,
wherein

the converting the second set of product management information in the first
form converts the second set of product management information in
the first form into a second set of product management information
that is in the second intermediate form:

converting the second set of product management information in the second intermediate form, wherein

the converting the second set of product management information in the
second intermediate form converts the second set of product
management information in the second intermediate form into a
second set of product management information in the target form;
and

in response to the converting the second set of product management information into the target form, performing an update of the new product management record in the target computerized product management system using the second set of product management information in the target form.

25. (Canceled)

26. (**Currently Amended**) A computer-readable medium [[carrying]] storing one or more sequences of instructions, wherein execution of the one or more sequences of instructions by one or more processors causes the one or more processors to perform:

### defining a product common model, wherein

the defining comprises

<u>determining a common set of fields of product management</u> information,

each field of the common set of fields corresponds to a source field in a source set of fields of product management information,

the source set of fields comprises

at least one source field that does not correspond to any field of the common set of fields,

the each field of the common set of fields further corresponds to a target field

in a target set of fields of product management information, and
the target set of fields comprises

at least one target field that does not correspond to any field of the common set of fields;

extracting a [[first]] source set of product management information in a first form, wherein

the first form is associated with a first source set is stored on a source computerized product management system.

the source set is stored within the source set of fields, and

the extracting is performed by an integration server coupled to the source computerized product management system;

converting the [[first]] source set of product management information in the first form into a first set of product management information that is in a second

intermediate form , wherein

the converting the source set converts the source set into a common set of product management information.

the common set of product management information is stored within the common set of fields of the product common model, and

- 14 - Application No.: 10/751,008

the converting the source set is performed by the integration server;

- converting the [[first]] common set of product management information in the second intermediate form into a first set of product management information in a target form, wherein
  - the converting the common set converts the common set into a target set of product management information,
  - the first set of product management information in the target form

    corresponds to target set is stored on a target computerized product
    management system,

the target set is stored within the target set of fields, and the converting the common set is performed by the integration server;

- in response to the converting of the first set of product management information into the target form, creating a new product management information record in the target computerized product management system;
- extracting a second set of product management information in the first form;
  converting the second set of product management information in the first form into
  a second set of product management information in the second intermediate
  form:
- converting the second set of product management information in the second intermediate form into a second set of product information in the target form; and
- in response to the converting the second set of product management information into the target form, performing an update of the new product management record in the target computerized product management system using the second set of product management information in the target form.

- 15 -

27. (Canceled)

Application No.: 10/751,008

28. (Currently Amended) A method in a computing system, the method comprising:

synchronizing existing target product management information with first and

second source product management information, wherein

the existing target product management information is stored at a target

computerized product management system,

the first source product management information is stored at a first source computerized product management system,

the second source product management information is stored at a second source computerized product management system,

the synchronizing depends in part on a characteristic of product management information, wherein

the characteristic allows a target record to be updated by an update
from the plurality of source computerized product
management systems,

### the synchronizing comprises

extracting a first set of the first source product management information in a first form, wherein

the extracting the first source product management
information is performed by an integration server, and
the first source product management information is in one of a
plurality of source formats,

the first form is associated with a first source computerized product management system;

converting the first set of first source product management information in the first form into an intermediate format,

into a first set of product management information that is in a second intermediate form;

extracting the second product management information, wherein

the extracting the second source product management

information is performed by the integration server, and

- 16 - Application No.: 10/751,008

another of the plurality of source formats,

converting the second source product management information into the intermediate format.

integrating the converted first and second source product
management information into integrated source product
management information,

converting the first set of integrated source product management information in the second intermediate form into a first set of target product management information in a first target form and product management information in a second target form, wherein

the target product management information is in a target format, and

updating the target computerized product management system with

the target product management information, wherein

the updating is performed by the integration server, and

the existing target product management information comprises

the target record.

the first target form is distinct from the second target form,
the product management information in the first target form
corresponds to a first target computerized product
management system, and

the product management information in the second target form corresponds to a second target computerized product management system;

in response to the converting of the first set of product management
information into the first target form, creating a new product
management information record in the first target computerized
product management system;

extracting a second set of product management information in the first form;

- converting the second set of product management information in the first form into a second set of product management information that is in the second intermediate form;
- converting the second set of product management information in the second intermediate form into a second set of product management information in the first target form;
- in response to the converting the product management information into the first target form, performing an update of the new product management record in the first target computerized product management system using the second set of product management information in the first target form.
- 29. (Currently Amended) The method of Claim 24, wherein the second intermediate form common set of product management information comprises a plurality of product elements.
- 30. (New) The method of Claim 24, further comprising extracting a second source set of product management information, wherein the source computerized product management system is one of a plurality of source computerized management systems,
  - a second source computerized product management system is another of the plurality of source computerized management systems,
  - the second source set is stored on the second source computerized product management system, and

the second source set is stored within a second source set of fields;
converting the second source set of product management information, wherein
the converting the second source set converts the second source set into a second
common set of product management information; and

integrating the second common set of product management information into the common set of product management information;

- 18 - Application No.: 10/751,008